

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
OTHER : ☐									

Work Order ID 163535

Tuesday, June 27, 2017 1:32:03 PM

163535

Page 2

Item ID: D2661-2 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle, RH, Fwd, Aft, Out
Start Date: 6/27/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/10/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.04				4	0		DAS 44 9-09 17-09-05
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.08				4			1179-5
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.30				(4)	0		2017-09-06 34 9-09 JS

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Misidentified ☐	Past Due ☐																																																															

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Item ID: D2661-2 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, RH, Fwd, Aft, Out
 Start Date: 6/27/2017 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/10/2017 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>m138014</i> Memo START TIME: <i>3:15</i> <i>3:00</i> FINISH TIME: <i>3:45</i>	0.00 0.29				<i>4</i>	<i>0</i>	<i>17-09-06</i>	<i>DAS 34 9-89</i>
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.04				<i>4</i>	<i>17-09-06</i>		<i>DAS 9 9-89</i>
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <i>54401</i> Memo	0.00 0.04				<i>4</i>	<i>SEP 07 2017</i>		<i>DAS 6 9-89</i>

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Work Order ID 163535

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Page 4

Item ID: D2661-2 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle, RH, Fwd, Aft, Out
Start Date: 6/27/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/10/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.40							
Quality Control									

DAS
21
9-89

SEP 07 2017

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

Tuesday, June 27, 2017 1:32:06 PM

Page 1

Work Order ID: 163535

163535

Parent Item: D2661-2

D2661-2

Parent Item Name: Saddle, RH, Fwd, Aft, Out

Start Date: 6/27/2017

Required Date: 7/10/2017

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP: C00.11.01Removed P/O for Powder Coat - in house

processEC

IPP REV:D

REDESIGN PER ENG ERROR 11-11-17 JLM VERIFIED BY:DD

IPP Rev:D As per Rev D 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003		Manufactured	No			100	Each	27.0000	1	4			
D6101-003									**				

Saddle Billet, 7075

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT040	20	
161598	20	
MAT046	7	
162144	7	

164 404

4 17/09/02 SBL

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

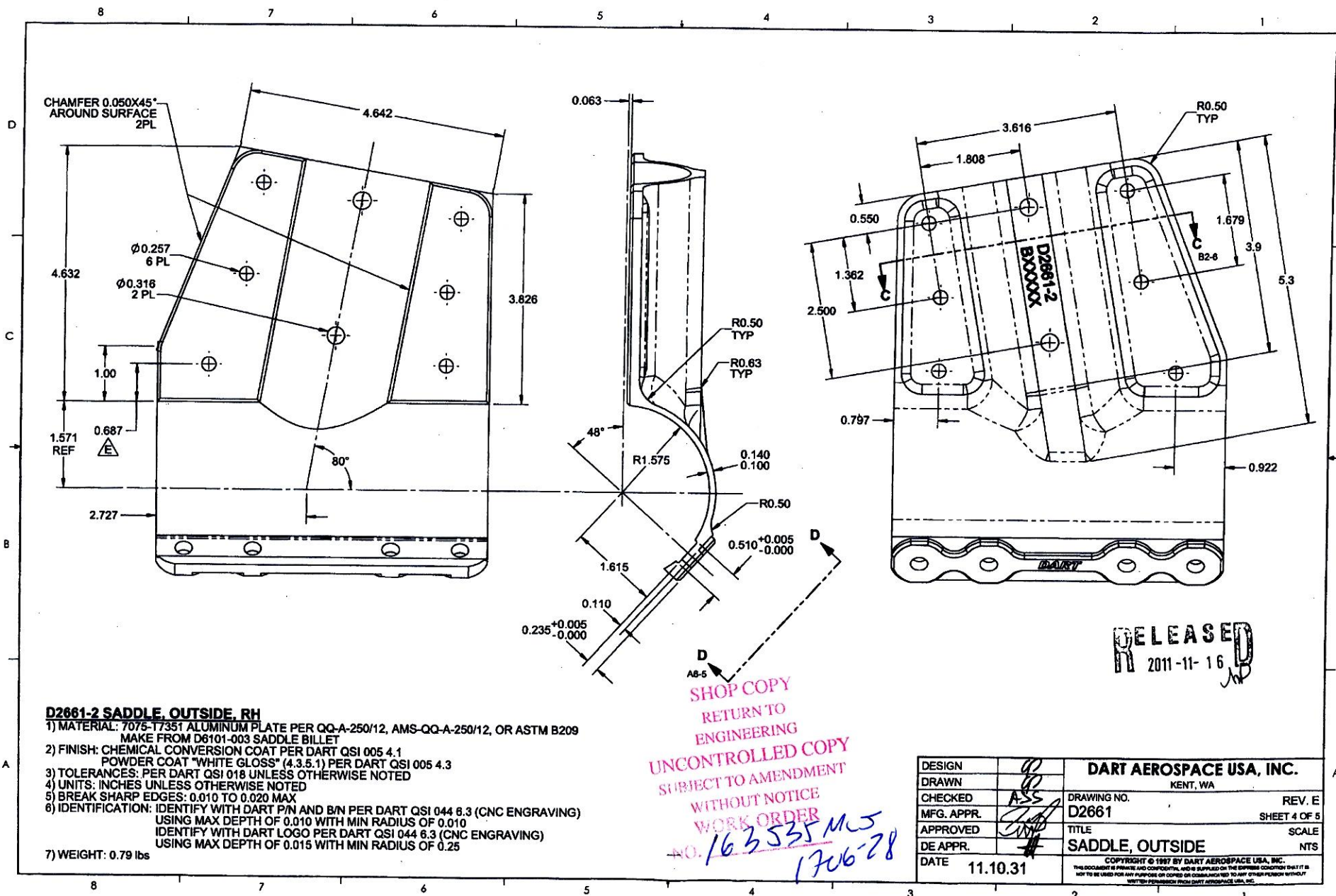
DART AEROSPACE LTD				Work Order: 163535	
Description: 206 Saddle, Outboard, Right side				Part Number: D2661-2	
Inspection Dwg: D2661 Rev: E DSK: Rev:				Page 1 of 1	

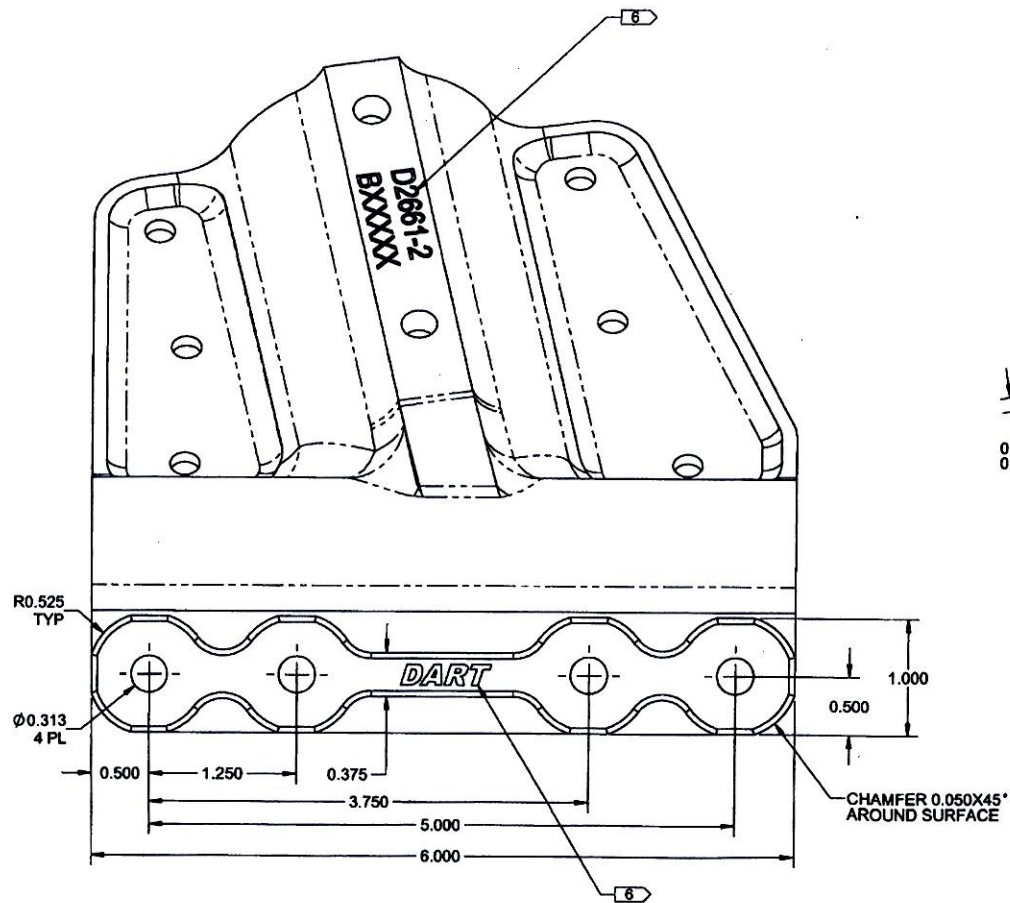
FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	3.611	3.621		3.616	3.616	3.616	3.616	
B	0.256	0.263		.257	.257	.257	.257	
C	0.315	0.322		.316	.316	.316	.316	
D	2.495	2.505		2.500	2.500	2.500	2.500	
E	1.674	1.684		1.679	1.679	1.679	1.679	
F	1.357	1.367		1.362	1.362	1.362	1.362	
G	0.100	0.140		.120	.120	.120	.120	
H	0.210	0.230		.226	.225	.225	.225	
I	0.615	0.685		.675	.675	.675	.675	
J	2.470	2.510		2.490	2.492	2.493	2.493	
K	1.313	1.343		1.328	1.328	1.328	1.328	
L	0.178	0.198		.188	.188	.188	.188	
M	0.470	0.530		.500	.500	.500	.500	
N	1.125	1.145		1.135	1.135	1.135	1.135	
O	0.100	0.180		.130	.130	.130	.130	
P	0.100	0.140		.133	.132	.132	.132	
Q	0.240	0.260		.255	.254	.254	.254	
R	0.677	0.697		.689	.689	.689	.689	
S	0.100	0.140		.125	.125	.125	.126	
T	1.565	1.585		1.575	1.575	1.575	1.575	
U	0.540	0.560		.550	.550	.550	.551	
V	0.912	0.932		.924	.924	.924	.924	
W	0.787	0.807		.797	.797	.797	.797	
X	5.990	6.010		5.998	5.999	5.999	5.999	
Y	4.995	5.005		5.000	5.000	5.000	5.000	
Z	0.490	0.510		.500	.500	.501	.500	
AA	0.312	0.319		.313	.313	.313	.313	
AB	0.990	1.010		1.005	1.005	1.005	1.005	
AC	1.245	1.255		1.250	1.250	1.250	1.250	
AD	0.490	0.510		.501	.501	.502	.502	
AE	3.745	3.755		3.750	3.750	3.750	3.750	
AF	0.235	0.240		.238	.238	.238	.238	
AG	0.510	0.515		.511	.511	.511	.511	
AH	0.100	0.120		.114	.114	.114	.114	
DAS Accept/Reject				✓	✓	✓	✓	

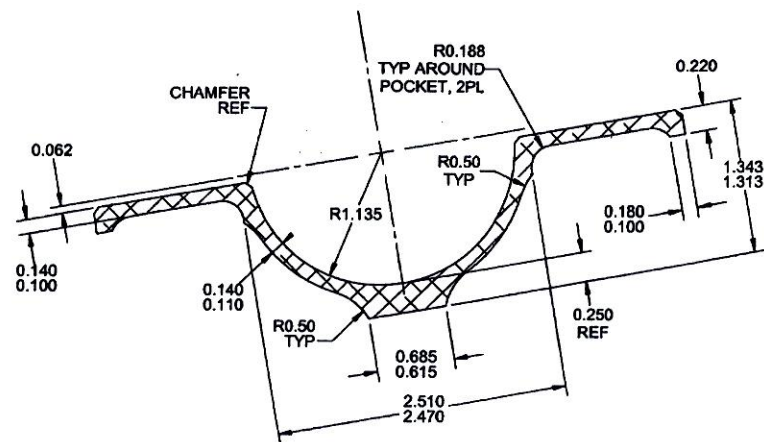
Measured by: 44	Date: 17-09-05
Audited by: 933	Date: 17-9-5
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
E	06.07.05	Revised per drawing revision C	KJ/JLM	
F	07.03.21	Revised per drawing revision D	KJ/JLM	
G	11.11.07	Dimensions C and F revised	KJ	
H	12.01.10	Revised per drawing revision E	KJ	





VIEW D-D B4-4
SCALE 1.5X
VIEW ROTATED



SECTION C-C C1-4
SCALE 1.5X

RELEASED
2011-11-16

DESIGN	00	DART AEROSPACE USA, INC.	
DRAWN	00	KENT, WA	
CHECKED	ASS	DRAWING NO.	REV. E
MFG. APPR.		D2661	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SADDLE, OUTSIDE	NTS
DATE	11.10.31	COPYRIGHT © 1987 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			